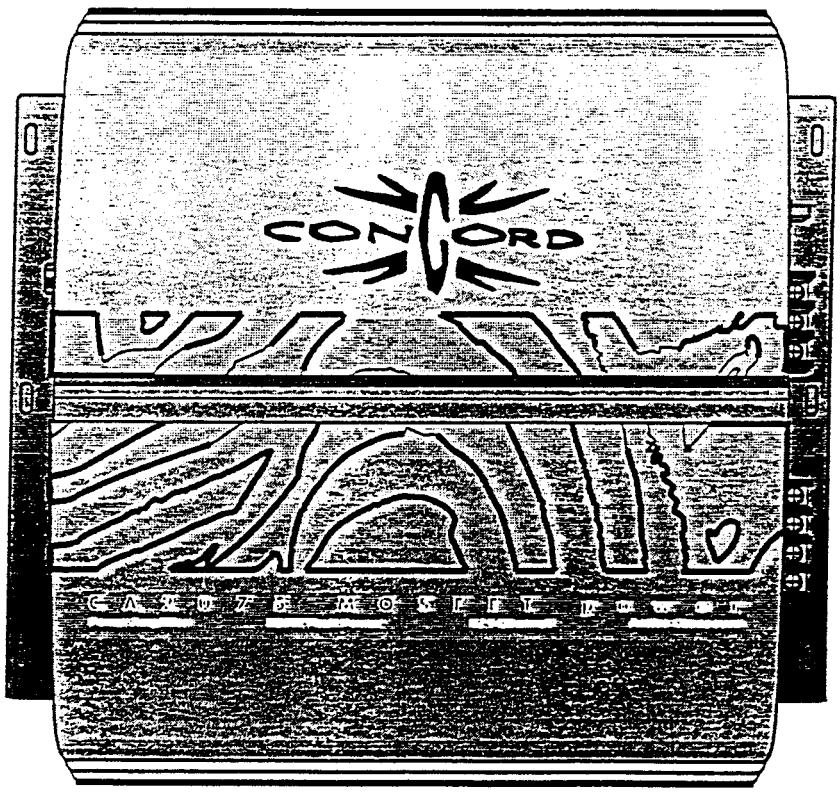
CONCORD

CA2075 2/1 CHANNEL AMPLIFIER

DRAFT TEST SPECIFICATION
AND TECHNICAL MANUAL



Concord Car Audio
80 Crossways Park West
Woodbury, NY 11797

501 Center Street
Huntington, IN 46750
H A Harman International Company

CA2075 Specifications

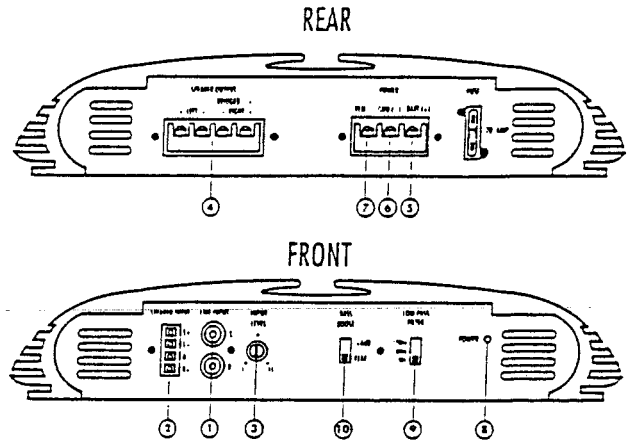
Model Number **Number of Channels**	**Nominal Value**	**Production Limit**
Single-ended Power Output into 4 Ohms 0.1% THD	65W x 2	55W x 2
Single-ended Power Output into 2 Ohms 1% THD	75W x 2	70W x 2
Bridged Power Output into 4 Ohms 1% THD	150W x 1	140W x 1
Maximum Power at 10% THD	150W x 2	
Signal-to-noise (dBA)	90	90 dBA
Freq. Resp. (Hz, +0, -1 dB)	10 Hz - 50 kHz	10 Hz - 50 kHz
Channel Sep. (dB)	65	> 60 at 1kHz
Built-in Crossover	Low-pass (off / 80Hz / 120Hz)	
Bass Boost	+5 dB at 50 Hz	
Actual Size (with connectors) Width (mm)	10-1/4"(259mm)	
Height(mm)	50mm	
Length(mm)	291mm	
Fuse Size (number)	30 A	
Line Level Sensitivity		
Speaker Level Sensitivity	250mV - 4V	
[illegible]	1V-9V (BTL Input)	

Test Conditions and Notes

- Power testing is completed using 4 Ohm, 250 Watt resistors (such as the Dale RH-250 250W, 4 ohm, 1% resistor)
- The distortion meter, scopes, and any other test equipment used to test the amplifier should be ground isolated to prevent ground loop noise problems.
- In some situations, it may be necessary to connect the ground of the distortion meter to the RCA ground terminal on the amplifier in order to prevent ground noise problems and obtain the correct THD measurements.
- Signal to Noise ratio is measured versus the rated power into 4 ohms using an A weighted meter with the gain control set to the minimum position.
- Frequency response measurements can be taken at 1 watt. Reference levels should be established at 1 kHz with all crossovers in the "off" position.
- Crossover frequency measurements should be taken at 1 watt output for the speaker outputs and 0.5 V output on the preamp outputs. The specification is taken relative to the 40 Hz output on the Low Pass filter and relative to the 1 kHz output on the high pass filter. Right and Left channel reference levels should be reestablished for each measurement.

Features

- Bridgeable
- Two ohm stable per channel
- Simultaneous Stereo + Mono operation
- Gold-plated screw terminals
- Bass EQ
- Low/line level inputs
- Speaker/high level inputs
- Gold-plated RCA jacks
- Built-in 80Hz and 120Hz low pass crossovers
- MOSFET switch mode power supply
- Quiet start circuitry
- Power LED
- Quick change fuse
- Short-circuit protection
- Thermal protection



Control and Connection Locations

(1) Line Level Inputs – Connect the line level outputs of your source unit and/or signal processor to these inputs. See Figure 4 for details.

(2) Speaker Level Inputs – Connect these speaker level inputs to a source unit's output if it does not have Line Level (RCA) outputs. See Figure 3 for details.

Caution: Do not use the line level and speaker level inputs of the same channel simultaneously.

(3) Input Level Controls – Adjust these controls, located on the end panel of the amplifier, to match the gain of the amplifier with the output level of your source unit or equalizer. Refer to "Final Connections and Adjustments" for more information.

(4) Speaker Output Connections – See the Speaker Connections section for details (Figure 5).

(5) Power Supply Connection – Connect to the positive battery terminal (+12VDC) with a fuse (not included) within 5" of the battery.

(6) Ground – Connect to the metal car chassis.

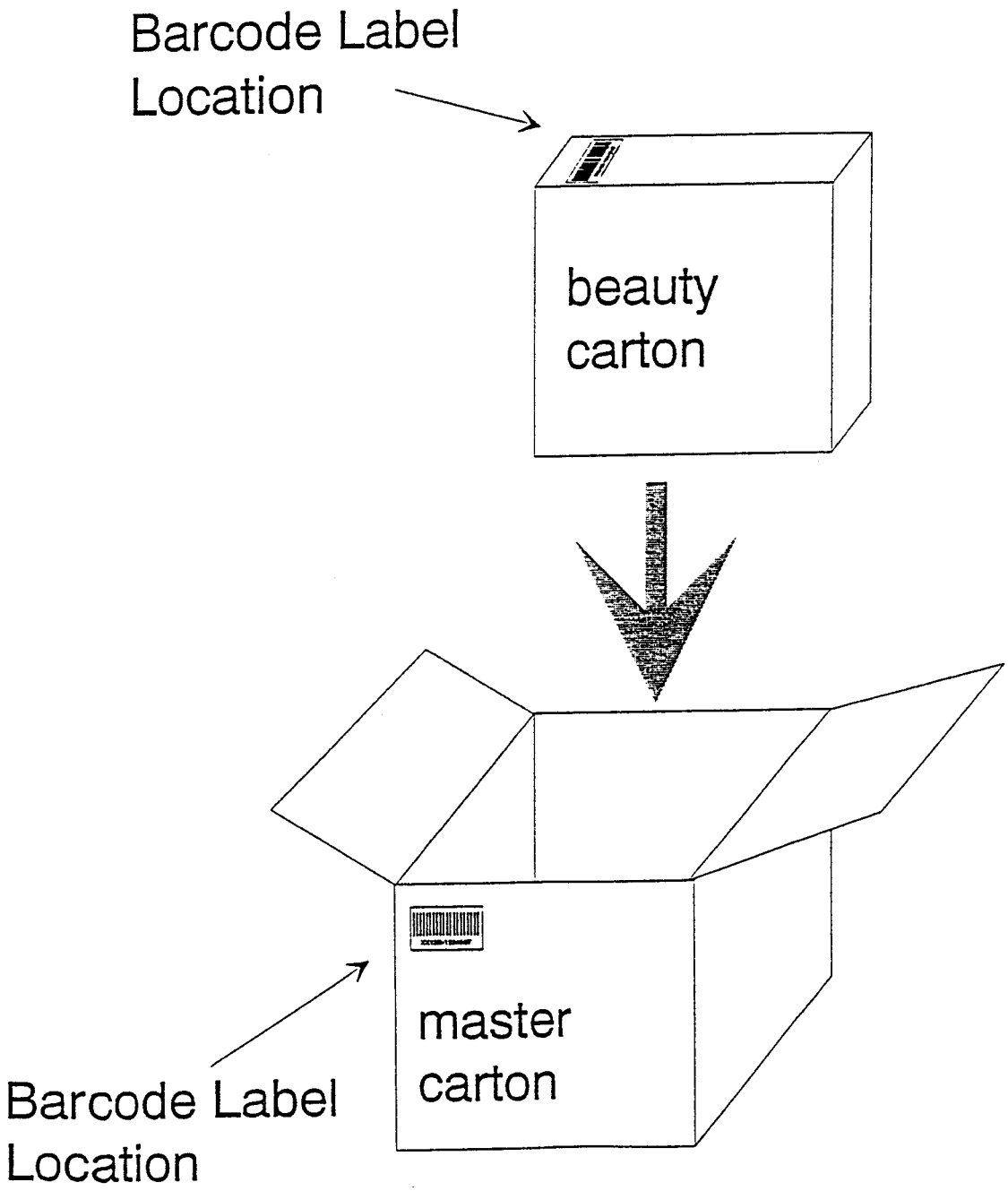
(7) Remote In – Connect to the remote on/off output of the source unit to automatically turn the amplifier on and off.

(8) Power Indicator – Illuminates when the amplifier is on.

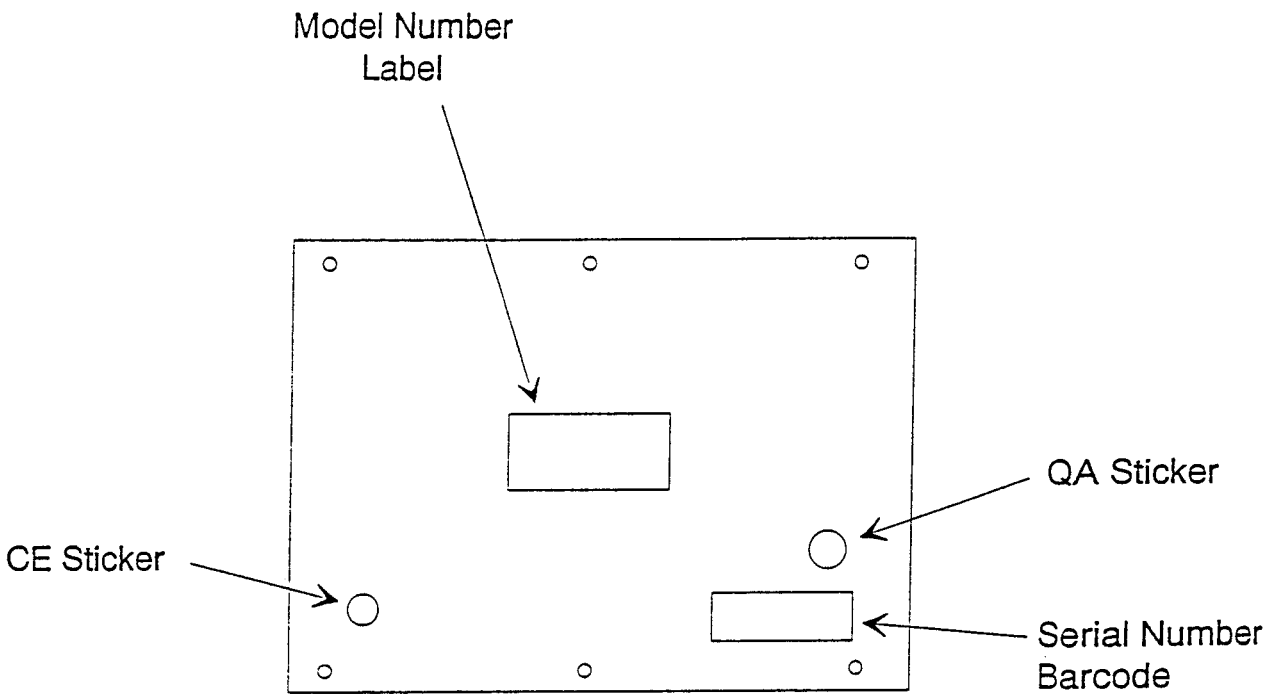
(9) Electronic Crossover Switches – Activates the built-in low-pass electronic crossover circuitry for use with subwoofers.

(10) Bass EQ Switch – Adds +5dB bass boost at 50 Hz when activated.

Serial Number Barcode Locations On Packaging



Amplifier Bottom Panel Label Locations



CAR AMPLIFIER SPARE PARTS LIST
CONCORD MODEL NO.: CA2075

NO.	ITEM	DESCRIPTION	R/Q'TY	PRICE	AMOUNT
1	I.C	KIA4943	150	$0.52	$78.00
2	I.C	uPC4570	150	$0.21	$31.20
3	I.C	KIA393S	150	$0.20	$29.25
4	MOSFET	IRF234	150	$0.98	$146.25
5	T.R, SWITCHING	KRA103M	100	$0.03	$2.73
6	T.R, DRIVER	KTA965Y(A1023Y)	300	$0.12	$35.10
7	T.R, SWITCHING	KTA1266Y	100	$0.03	$2.85
8	T.R, DRIVER	KTA1268GR	300	$0.05	$15.60
9	T.R, DRIVER	2SB631E	300	$0.18	$54.60
10	T.R, POWER	TIP35C	300	$0.94	$280.80
11	T.R, DRIVER	BC517	300	$0.05	$13.65
12	T.R, SWITCHING	KTC3198Y	100	$0.03	$2.60
13	T.R, DRIVER	KTC2236Y(C1207Y)	300	$0.12	$35.88
14	T.R, DRIVER	KTC3200GR	300	$0.05	$15.60
15	T.R, DRIVER	2SD600E	300	$0.18	$54.60
16	T.R, POWER	TIP36C	300	$0.96	$288.60
17	DIODE, FAST RECOVERY	NDF020-10N	50	$0.65	$32.50
18	DIODE, FAST RECOVERY	NDF020-10C	50	$0.65	$32.50
19	DIODE, SILICON	1N5402	50	$0.05	$2.60
20	DIODE, ZENER	MTZ-16B(16V 0.5W)	50	$0.02	$1.24
21	DIODE, ZENER	MTZ-10A(10V 0.5W)	50	$0.02	$1.24
22	DIODE, ZENER	UZP 39B(39V 1W)	50	$0.05	$2.47
23	DIODE, SWITCHING	1N4148	50	$0.01	$0.47
24	DIODE, SILICON	1N4002	50	$0.02	$0.85
25	SCR	MCR100-6	50	$0.14	$7.15
26	L.E.D	KLR 124E(RED)	75	$0.05	$3.61
27	L.E.D	KLG 124E(YELLOW)	75	$0.05	$3.61
28	POTENTIOMETER	142RH0115PB50K	50	$0.33	$16.25
29	SLIDE SWITCH	42002(4C-2P)	50	$0.20	$9.75
30	SLIDE SWITCH	43142(4C-3P)	50	$0.20	$9.75
31	RFC COIL	7T 21mm	50	$0.24	$12.16
32	FILTER COIL	73uH, 21mm	50	$0.59	$29.25
33	TOROIDAL COIL	T-38718	50	$2.95	$147.62
34	SPRING COIL	1.5uH, 10phi	50	$0.05	$2.41
35	THERMISTOR(LEAD WIRE)	150Kohm-80mm	50	$0.29	$14.30
36	THERMISTOR(LUG)	150Kohm	50	$0.16	$7.80
37	CEMENT RESISTOR	5W 0.22ohm x 2	50	$0.25	$12.68
38	M.O. RESISTOR	2W 10ohm	50	$0.02	$1.17
39	M.O. RESISTOR	1W 10ohm	50	$0.01	$0.72
40	M.O. RESISTOR	1W 330ohm	50	$0.01	$0.72
41	C.F. RESISTOR	1/2W 10ohm	50	$0.01	$0.38
42	C.F. RESISTOR	1/2W 18ohm	50	$0.01	$0.38
43	C.F. RESISTOR	1/2W 82ohm	50	$0.01	$0.38
44	C.F. RESISTOR	1/2W 100ohm	50	$0.01	$0.38
45	C.F. RESISTOR	1/2W 390ohm	50	$0.01	$0.38
46	C.F. RESISTOR	1/6W 47ohm	50	$0.01	$0.33
47	C.F. RESISTOR	1/6W 100ohm	50	$0.01	$0.33
48	C.F. RESISTOR	1/6W 330ohm	50	$0.01	$0.33
49	C.F. RESISTOR	1/6W 390ohm	50	$0.01	$0.33
50	C.F. RESISTOR	1/6W 560ohm	50	$0.01	$0.33
51	C.F. RESISTOR	1/6W 680ohm	50		

52	C.F. RESISTOR	1/6W	750ohm	50	$0.01	$0.33
53	C.F. RESISTOR	1/6W	1Kohm	50	$0.01	$0.33

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54	C.F. RESISTOR	1/6W 1.2Kohm	50	$0.01	$0.33
55	C.F. RESISTOR	1/6W 1.7Kohm	50	$0.01	$0.33
56	C.F. RESISTOR	1/6W 2.2Kohm	50	$0.01	$0.33
57	C.F. RESISTOR	1/6W 2.7Kohm	50	$0.01	$0.33
58	C.F. RESISTOR	1/6W 3.3Kohm	50	$0.01	$0.33
59	C.F. RESISTOR	1/6W 4.7Kohm	50	$0.01	$0.33
60	C.F. RESISTOR	1/6W 5.6Kohm	50	$0.01	$0.33
61	C.F. RESISTOR	1/6W 6.8Kohm	50	$0.01	$0.33
62	C.F. RESISTOR	1/6W 10Kohm	50	$0.01	$0.33
63	C.F. RESISTOR	1/6W 12Kohm	50	$0.01	$0.33
64	C.F. RESISTOR	1/6W 15Kohm	50	$0.01	$0.33
65	C.F. RESISTOR	1/6W 22Kohm	50	$0.01	$0.33
66	C.F. RESISTOR	1/6W 33Kohm	50	$0.01	$0.33
67	C.F. RESISTOR	1/6W 47Kohm	50	$0.01	$0.33
68	C.F. RESISTOR	1/6W 56Kohm	50	$0.01	$0.33
69	C.F. RESISTOR	1/6W 68Kohm	50	$0.01	$0.33
70	C.F. RESISTOR	1/6W 100Kohm	50	$0.01	$0.33
71	ELEC. CAPACITOR	4700uF/35V(22*30)L	50	$0.91	$45.50
72	ELEC. CAPACITOR	1000uF / 25V	50	$0.17	$8.58
73	ELEC. CAPACITOR	470uF / 25V	50	$0.11	$5.73
74	ELEC. CAPACITOR	220uF / 16V	50	$0.04	$1.99
75	ELEC. CAPACITOR	100uF / 16V	50	$0.03	$1.48
76	ELEC. CAPACITOR	47uF / 16V	50	$0.03	$1.27
77	ELEC. CAPACITOR	10uF / 16V	50	$0.03	$1.30
78	ELEC. CAPACITOR	4.7uF / 50V	50	$0.03	$1.30
79	ELEC. CAPACITOR	1uF / 50V	50	$0.03	$1.30
80	ELEC. CAPACITOR	0.47uF / 50V	50	$0.03	$1.37
81	METAL BOX CAPACITOR	0.15uF / 100V	50	$0.05	$2.60
82	MYLAR CAPACITOR	0.1uF / 100V	50	$0.03	$1.40
83	MYLAR CAPACITOR	0.068uF/ 100V	50	$0.02	$1.24
84	MYLAR CAPACITOR	0.047uF/ 100V	50	$0.02	$1.07
85	MYLAR CAPACITOR	0.01uF / 100V	50	$0.01	$0.73
86	MYLAR CAPACITOR	0.0039uF/ 100V	50	$0.01	$0.63
87	MYLAR CAPACITOR	0.001uF/ 100V	50	$0.02	$0.83
88	CERAMIC CAPACITOR	180pF / 50V	50	$0.01	$0.57
89	CERAMIC CAPACITOR	100pF / 50V	50	$0.01	$0.57
90	CERAMIC CAPACITOR	33pF / 50V	50	$0.01	$0.52
91	CERAMIC CAPACITOR	10pF / 50V	50	$0.01	$0.52
92	CERAMIC CAPACITOR	0.1uF / 50V	50	$0.05	$2.60
93	HIGH LEVEL CONNECTOR	4P, WHT/GRY	50	$0.36	$17.81
94	AUTO FUSE	30 AMPERE	200	$0.05	$9.88
95	FUSE HOLDER	HO 448	50	$0.26	$13.00
96	RCA JACK.	2P, RED/WHT	25	$0.27	$6.66
97	SCREW TERMINAL	3P, POWER-INPUT	50	$0.74	$37.05
98	SCREW TERMINAL	4P, SPEAKER-OUT	50	$0.90	$44.85
99	OWNER'S MANUAL		200	$0.51	$102.63
100	P.C.B ASS'Y		10	$40.30	$403.00
	TOTAL :				$2,168.20
	SERVICE MANUAL			$0.00	$0.00

L CH LOW INPUT
L CH HIGH INPUT
R CH LOW INPUT
R CH HIGH INPUT
BASS BOOST SW1 4C-2P 1/2
LOW PASS FILTER
OP AMP -12V
OP AMP +12V
L.CH OUT
R.CH OUT
NEG TEMP COEFF.
REMOTE (UNLOAD) +30 -32
GND
B+
uPC494C
SCR
TOROID OVER-TEMP TH
CA-2075